

AUG 03 2006

K06-2037  
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**Summary of Safety and Effectiveness  
Triathlon® Low Profile Tibial Tray**

Proprietary Name: Triathlon® Low Profile Tibial Tray  
Common Name: Tibial Tray Knee Component  
Classification Name and Reference: Knee Joint Patellofemorotibial  
Polymer/Metal/Polymer Semi-Constrained  
Cemented Prosthesis, 21 CFR §888.3560  
Device Product Code: 87 JWH  
For Information Contact: Francisco Haro, Regulatory Affairs Specialist  
Howmedica Osteonics Corp.  
325 Corporate Drive  
Mahwah, NJ 07430  
Phone: (201) 831-5493  
Fax: (201) 831-6038  
Date Summary Prepared: July 14, 2006

**Description:**

This Special 510(k) submission is a line extension intended to add a low profile tibial tray to the Triathlon® Primary System.

**Intended Use:**

The modifications do not alter the intended use of the predicate system as cleared in the referenced premarket notifications. The subject and predicate devices are sterile, single use tibial tray knee components intended to be used in total knee arthroplasty (TKA). The indications for use for the Triathlon® Low Profile Tibial Tray are provided below.

**Indications for Use:**

- Painful, disabling joint disease of the knee resulting from: degenerative arthritis, rheumatoid arthritis or post-traumatic arthritis.
- Post-traumatic loss of knee joint configuration and function.
- Moderate varus, valgus, or flexion deformity in which the ligamentous structures can be returned to adequate function and stability.

**Substantial Equivalence:**

The subject Triathlon® Low Profile Tibial Tray shares the same intended use, and basic design concepts as that of the currently available tibial trays of the Triathlon® Posterior Stabilizing (PS) Total Knee System, Triathlon® Cruciate Retaining (CR) Total Knee System, and Scorpio® Low Profile Tibial Tray. Mechanical testing demonstrated comparable mechanical properties to the predicate components and substantial equivalence to these devices.



## DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

AUG 03 2006

Howmedica Osteonics Corp.  
Attn: Mr. Francisco Haro  
Regulatory Affairs Specialist  
325 Corporate Drive  
Mahwah, New Jersey 07430

Re: K062037

Trade/Device Name: Triathlon® Low Profile Tibial Tray

Regulation Number: 21 CFR 888.3560

Regulation Name: Knee joint patellofemorotibial polymer/metal/polymer semi-constrained cemented prosthesis

Regulatory Class: Class II

Product Code: JWH

Dated: July 14, 2006

Received: July 19, 2006

Dear Mr. Haro:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

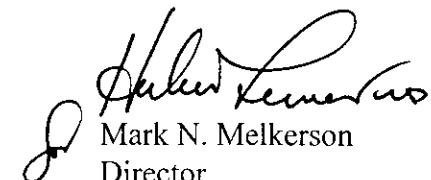
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Page 2 – Mr. Francisco Haro

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



Mark N. Melkerson  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

510(k) Number (if known): K062037Device Name: Triathlon® Low Profile Tibial Tray

The Triathlon® Low Profile Tibial Tray is intended to be used with commercially available Triathlon® femoral components and associated patellar components, and tibial bearing inserts in primary cemented total knee arthroplasty. The indications/contraindications for the Triathlon® Low Profile Tibial Tray are outlined below:

**Indications for Use:**

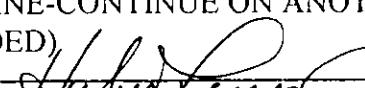
- Painful, disabling joint disease of the knee resulting from: degenerative arthritis, rheumatoid arthritis or post-traumatic arthritis.
- Post-traumatic loss of knee joint configuration and function.
- Moderate varus, valgus, or flexion deformity in which the ligamentous structures can be returned to adequate function and stability.

**Contraindications:**

- Any active or suspected latent infection in or about the knee joint.
- Any mental or neuromuscular disorder which would create an unacceptable risk of prosthesis instability, prosthesis fixation failure, or complications in postoperative care.
- Bone stock compromised by disease, infection or prior implantation which cannot provide adequate support and/or fixation to the prosthesis.
- Skeletal immaturity.
- Severe instability of the knee joint secondary to the absence of collateral ligament integrity and function.
- Obesity. An overweight or obese patient can produce loads on the prosthesis which can lead to failure of the fixation of the device or to failure of the device itself.
- The use of bone augmentations is contraindicated with the low profile tibial trays.

Prescription Use X AND/OR Over-The-Counter Use \_\_\_\_\_  
 (Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE  
 OF NEEDED)

  
 Concurrence of CDRH, Office of Device Evaluation (ODE)  
**(Division Sign-Off)**

**Division of General, Restorative,  
 and Neurological Devices**

510(k) Number K062037